

LASER DIODE, SEMICONDUCTOR LIGHT-EMITTING DEVICE, AND METHOD OF PRODUCTION THEREOF

ABSTRACT OF THE DISCLOSURE

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A laser diode capable of reducing an operating current and thereby improving long term reliability and able to be produced by a simpler process than in the prior art and a semiconductor light emitting device and a method of production thereof; wherein a first clad layer, an active layer, and a second clad layer are formed on a substrate, a third clad layer and a contact layer are formed on a current injection stripe region thereon, an electrode is formed so as to be connected to the second clad layer in regions other than the current injection stripe region and to be connected to the contact layer, and, at the time of emitting laser light from a laser light oscillation region by injection of a first current to the electrode via the contact layer by application of voltage, a second current which is smaller than the first current is injected in regions other than the current injection stripe region via the second clad layer, so that a laser diode is configured wherein currents at ends of the laser light oscillation region are controlled to

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generate self pulsation.